SSRISK: a systemic risk measure for the Colombian banking system 2005-2021

Download Keep in mind
The series Working Papers on Economics is published by the Office for Economic Studies at the *Banco de la República* (Central Bank of *Colombia*). It contributes to the dissemination and promotion of the work by researchers from the institution. This series is indexed at Research Papers in Economics (RePEc).

On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. The works published are provisional, and their authors are fully responsible for the opinions expressed in them, as well as for possible mistakes. The opinions expressed herein are those of the authors and do not necessarily reflect the views of Banco de la República or its Board of Directors.

AUTHOR OR EDITOR Sánchez-Quinto, Camilo Eduardo

The series Borradores de Economía (Working Papers on Economics) contributes to the dissemination and promotion of the work by researchers from the institution. On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. This series is indexed at Research Papers in Economics (RePEc). The opinions contained in this document are the sole responsibility of the author and do not commit Banco de la República or its Board of Directors.

Publication Date: Friday, 16 of September 2022 Abstract
One of the lessons we learned from the 2008 financial crisis was the importance of monitoring the systemic risk in the stability of financial systems. In this regard, lines of research have been developed with the aim to provide reliable and timely metrics on this risk, taking as much information as possible. Among these, SRISK (Brownlees & Engle, 2016) stands out, a measure that combines market behavior, capital ratio, leverage and balance sheet of financial institutions to find the systemic risk exposure under a sustained crisis scenario. This paper replicates the SRISK methodology adjusted for the Colombian banking system using GJR-GARCH-DCC models. The results show that, although systemic risk of banks has been historically low, it reached its maximum in 2020, adding empirical evidence on the impact of Covid-19 crisis. Furthermore, it is found that SRISK correlates with leading indicators of economic and financial sectors, in addition to having predictive power in the sense of Granger causality.

Fuente: https://www.banrep.gov.co/en/ssrisk-systemic-risk-measure-colombian-banking-system-2005-2021